University of North Texas at Dallas
Fall 2011
SYLLABUS

CSCE 3530: Introduction to Computer Networks   3Hrs

Department of	Mathematics and Information Sciences	Division of	Liberal Arts and Sciences

Instructor Name:	Mohamad Bayan
Office Location:	DAL2 305
Office Phone:	
Email Address:	Mohamad.Bayan@unt.edu

Office Hours:	Monday 8:30-9:30 PM, Wednesday 6:00-7:00 PM
Virtual Office Hours:	

Classroom Location:	DAL2 241
Class Meeting Days & Times:	MW 7:00-8:20 PM

Course Catalog Description:	

Prerequisites:	CSCE 2610
Co-requisites:	

Required Text:	"Computer Networking: A Top Down Approach", 5th edition, by Jim Kurose and Keith Ross. Addison-Wesley. ISBN: 978-0136079675

Recommended Text and References:	

Access to Learning Resources:	UNT Dallas Library: phone: (972) 780-3625; web: http://www.unt.edu/unt-dallas/library.htm UNT Dallas Bookstore: phone: (972) 780-3652; e-mail: 1012mgr@fheg.follett.com

Course Goals or Overview:

The goal of this course is to provide an introduction to modern computer networks, including both wired and wireless networks.

Learning Objectives/Outcomes: At the end of this course, the student will

1	Possess a conceptual view of the role of computers in communications.
2	Understand Internet communication protocols.
3	Be able to perform fundamental network programming.
4	Understand various network architectures.
5	Recognize the role of application protocols.
6	Understand various routing and forwarding protocols.

Course Outline

This schedule is subject to change by the instructor. Any changes to this schedule will be communicated by the Blackboard or in class. Blackboard will be used to communicate class notes and other course materials, to post homework assignments, and to post grades.

TOPICS	TIMELINE
1. Introduction: the Internet, protocols, network edge, network core.	Week of 8/29/2011
2. Introduction: performance, security, protocol layers, history.	Week of 9/5/2011
3. Application layer: principles, Web and HTTP, FTP.	Week of 9/12/2011
4. Application layer: e-mail, DNS, P2P.	Week of 9/19/2011
5. Application layer: socket programming with TCP and UDP.	Week of 9/26/2011
6. Transport layer: services, multiplexing and demultiplexing, UDP.	Week of 10/3/2011
7. Transport layer: reliable data transfer, TCP, congestion control.	Week of 10/10/2011
8. Review. Midterm Exam on 10/20/2010.	Week of 10/17/2011
9. Network layer: introduction, virtual networks, routers, IP.	Week of 10/24/2011
10. Network layer: routing algorithms, Internet routing, broadcast routing.	Week of 10/31/2011
11. Link layer: introduction, error detection, multiple-access, addressing.	Week of 11/7/2011
12. Link layer: Ethernet, switches, PPP, virtualization, web request example.	Week of 11/14/2011
13. Wireless networks: introduction, links, Wi-Fi, cellular Internet.	Week of 11/21/2011
14. Mobile networks: mobile addressing/routing, mobile IP.	Week of 11/28/2011
15. Mobile networks: handling mobility, mobility in higher-layer protocols.	Week of 12/5/2011
16. Final Exam	12/14/2011 7:30 PM – 9:30 PM

Course Evaluation Methods

This course will utilize the following instruments to determine student grades and proficiency of the learning outcomes for the course.

Exams – written tests designed to measure knowledge of course material.
Assignments – written assignments designed to supplement and reinforce course material.
Class Participation – attendance and participation in class discussions.

Grading Matrix:

Instrument	Value (points or percentages)	Total
Assignments	40%	40%
Midterm Exam	10%	25%
Class Participation	10%	10%
Final Exam	20%	25%
Total:		**100%**

Grade Determination:
A: 90% or greater
B: at least 80% and less than 90%
C: at least 70% and less than 80%
D: at least 60% and less than 70%
F: less than 60%

University Policies and Procedures

Students with Disabilities (ADA Compliance):
The University of North Texas Dallas faculty is committed to complying with the Americans with Disabilities Act (ADA). Students' with documented disabilities are responsible for informing faculty of their needs for reasonable accommodations and providing written authorized documentation. Grades assigned before an accommodation is provided will not be changed as accommodations are not retroactive. For more information, you may visit the Student Life Office, Suite 200, Building 2 or call Laura Smith at 972-780-3632.

Student Evaluation of Teaching Effectiveness Policy:
The Student Evaluation of Teaching Effectiveness (SETE) is a requirement for all organized classes at UNT. This short survey will be made available to you at the end of the semester, providing you a chance to comment on how this class is taught. I am very interested in the feedback I get from students, as I work to continually improve my teaching. I consider the SETE to be an important part of your participation in this class.

Assignment Policy:
Assignments should be submitted on time. No late assignments will be allowed except in the case of documented emergencies.

Exam Policy:
Exams should be taken as scheduled. No makeup examinations will be allowed except for documented emergencies (See Student Handbook).

Academic Integrity:
Academic integrity is a hallmark of higher education. You are expected to abide by the University's code of Academic Integrity policy. Any person suspected of academic dishonesty (i.e., cheating or plagiarism) will be handled in accordance with the University's policies and procedures. Refer to the Student Code of Academic Integrity at http://www.unt.edu/unt-dallas/policies/Chapter%2007%20Student%20Affairs,%20Education,%20and%20Funding/7.002%20Code%20of%20Academic_Integrity.pdf for complete provisions of this code.

Bad Weather Policy:
On those days that present severe weather and driving conditions, a decision may be made to close the campus. In case of inclement weather, call UNT Dallas Campuses main voicemail number (972) 780-3600 or search postings on the campus website www.unt.edu/dallas. Students are encouraged to update their Eagle Alert contact information, so they will receive this information automatically.

Attendance and Participation Policy:
The University attendance policy is in effect for this course. Class attendance and participation is expected because the class is designed as a shared learning experience and because essential information not in the textbook will be discussed in class. The dynamic and intensive nature of this course makes it impossible for students to make-up or to receive credit for missed classes. Attendance and participation in all class meetings is essential to the integration of course material and your ability to demonstrate proficiency. Students are responsible to notify the instructor if they are missing class and for what reason. Students are also responsible to make up any work covered in class. It is recommended that each student coordinate with a student colleague to obtain a copy of the class notes, if they are absent.

Diversity/Tolerance Policy:
Students are encouraged to contribute their perspectives and insights to class discussions. However, offensive & inappropriate language (swearing) and remarks offensive to others of particular nationalities, ethnic groups, sexual preferences, religious groups, genders, or other ascribed statuses will not be tolerated. Disruptions which violate the Code of Student Conduct will be referred to the Office of Student Life as the instructor deems appropriate.

Optional Policies:
Food, drink, cell phones and other electronic/noise-making gadgets are prohibited in the classroom. The use of laptops is allowed only for class-related activities.